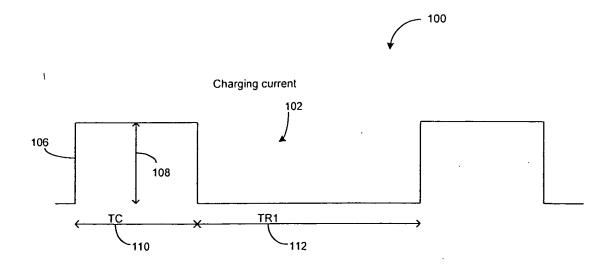
Exemplary charging profile



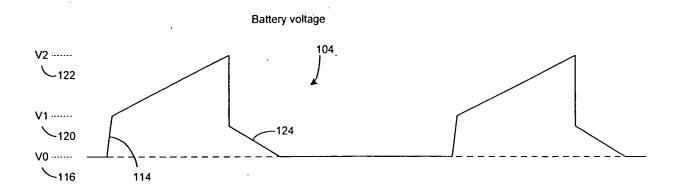
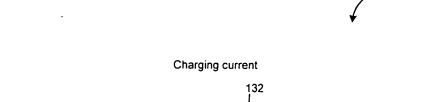
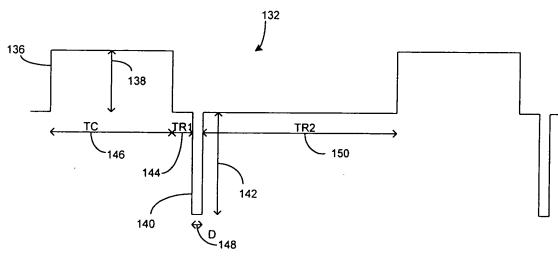


FIGURE 1



Exemplary charging profile





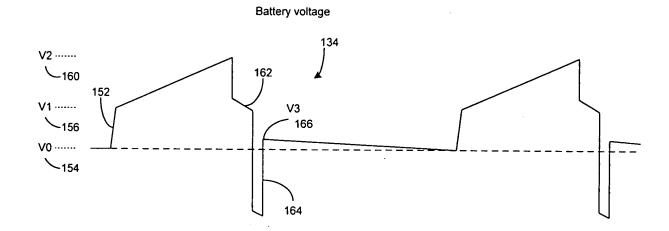
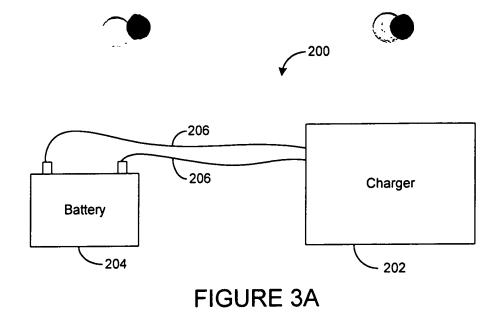


FIGURE 2



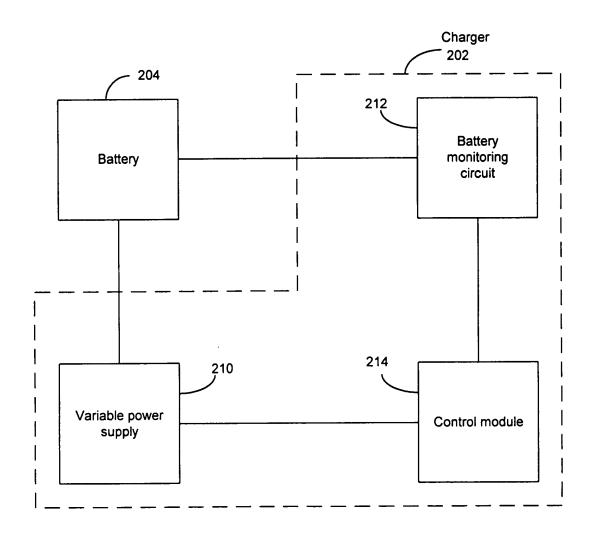


FIGURE 3B

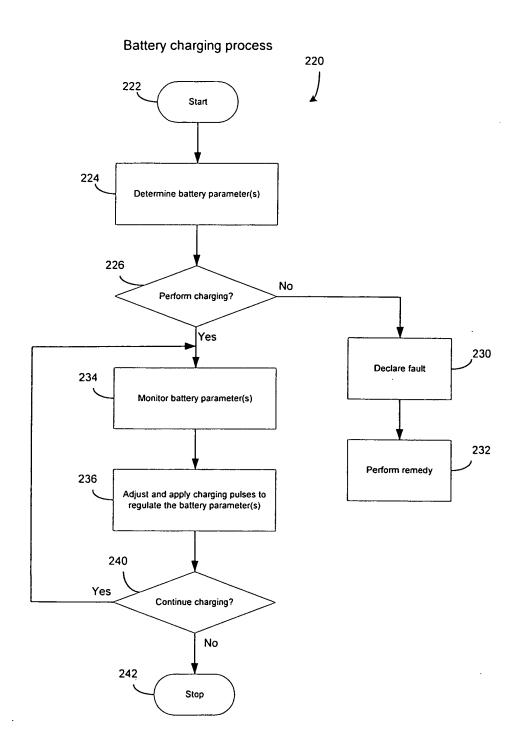


FIGURE 4



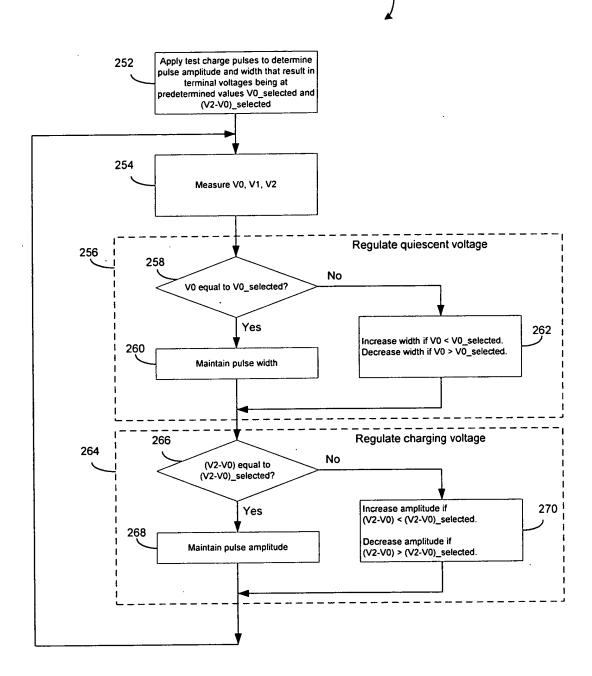


FIGURE 5

Exemplary process for adaptive regulated pulse charging that includes discharging pulses

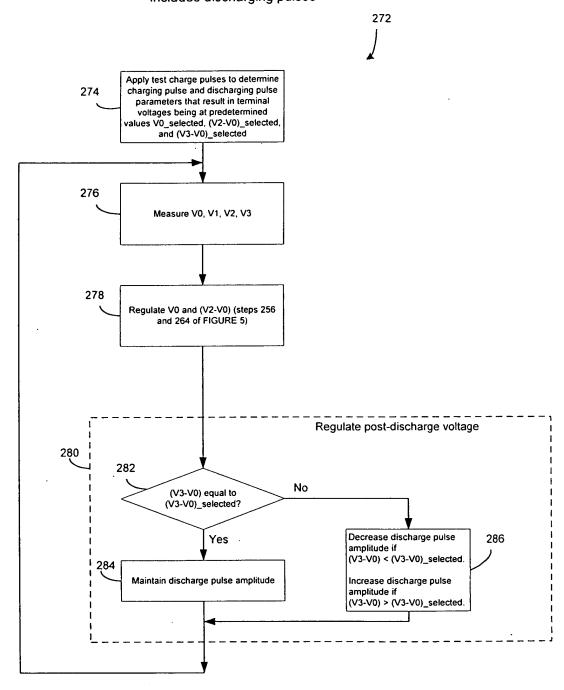


FIGURE 6

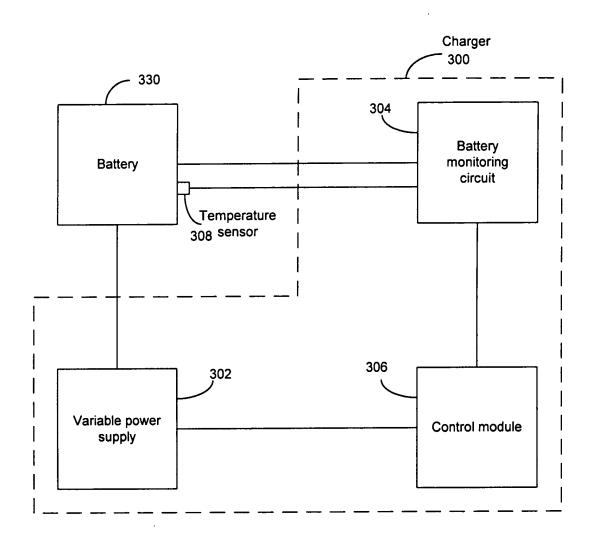


FIGURE 7

based on battery temperature 310 312 Apply test charge pulses to determine battery's reference voltages that result in acceptable battery temperature limits temp_low and temp_high 314 Measure battery temperature Regulate battery temperature 316 temp_low < temp < temp_high 322 Yes If temp < temp_low, increase (V2-V0)_selected by 0.1 volt. If temp > temp_high, decrease (V2-V0)_selected 320 by 0.1 volt. Maintain battery's reference voltages

Exemplary process for regulating pulse charging

FIGURE 8

...